

FEB 05 2004

OFFICIAL

Patent

Customer No.: 31561  
Docket No. 9237-US-PA  
Application No.: 10/064,765

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Applicant : Yu  
Application No. : 10/064,765  
Filed : Aug. 15, 2002  
For : METHOD FOR FORMING CONTACT OR VIA PLUG  
Art Unit : 2829  
Examiner : KILDAY, LISA A

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TRANSMITTAL LETTER

002-1-703-872-9306

(Via fax: 5 pages, followed by confirmation copy via courier)

Assistant Commissioner for Patents  
Arlington, Virginia 22202

Dear Sirs,

In response to the Office Action dated January 14, 2004, please find the relevant paper in response to paper No. 0104. Following the fax transmission, a hard copy via courier will also be forwarded to the Office.

Enclosed documents via courier will include:

- ☒ Response to Restriction Requirement in (3) pages
- ☒ Fax confirmation report
- ☒ Prepaid return postcard
- ☐ Extension fee

I believe that no fee is incurred. However, the Commissioner is authorized to charge any fees required in connection with the filing of this paper to account No. 50-2620 (Order No.: 9237-US-PA)

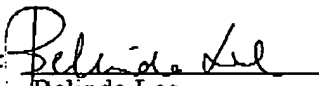
Thank you for your assistance in the subject matter. If you have any questions, please feel free to contact me.

**Patent**

Customer No.: 31561  
Docket No. 9237-US-PA  
Application No.: 10/064,765

Respectfully Submitted,  
JIANQ CHYUN Intellectual Property Office

Date: Feb. 5, 2004

By:   
Belinda Lee  
Registration No.: 46,863

**Please send future correspondence to:**  
7F. -1, No. 100, Roosevelt Rd.,  
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Tel: 886-2-2369 2800  
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FEB 05 2004

OFFICIAL

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:		} I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on
Application No.:	10/064,765	
Filed:	August 15, 2002	
For:	METHOD FOR FORMING CONTACT OR VIA PLUG	
		)
		) (Date) _____
Applicant:	Cheng-Ta Yu	) _____
Examiner:	KILDAY, LISA A.	) _____
Art Unit	2829	) _____

RESPONSE TO RESTRICTION REQUIREMENT

U.S. Patent and Trademark Office  
Commissioner for Patents  
2011 South Clark Place  
Customer Window, Mail Stop Non-Fee Amendment  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington, Virginia 22202

Dear Sir:

In response to the Restriction Requirement mailed on January 14, 2004, regarding to the above-identified application, Applicant elects Embodiment I : method for forming a contact or via plug where the liner layers consist of PECVD material, **with traverse**.

According to Chapter 803 in the MPEP, an application may properly be required to be restricted to one of two or more claimed inventions only if they are able to support separate patents and they are either independent or distinct. Further, to establish a prima facie case for restricting the claims of an application, the Examiner needs to (1) provide reasons why the

inventions as claimed are distinct, (2) explain why the distinct inventions must be restricted on the basis of (a) separate classification, (b) separate status in the art, or (c) a different field of search. Moreover, claims to be restricted to different species must be mutually exclusive.

A restriction requirement imposed on Embodiment I and Embodiment II are not proper because these claimed inventions are not able to support separate patents and they are not distinct species as defined in the MPEP. Embodiment I and Embodiment II, as alleged by the office as distinct species, are directed to a method for forming a contact or via plug, wherein at least a multiple-step etching method is used. To accomplish the multi-step etching process, at least liner layers are formed along the surface of an opening. The liner layers can be formed with different materials so as the forming of a contact or via plug with the multiple-step etching process is accomplished, which is the subject matter of the present invention. Forming the liner layers with the different materials are basically different definitions of the same disclosed subject matter, varying only in breadth or scope. A restriction to one thereof is thus not proper. Similarly, the two-step etching, the three-step etching and the three-plus-step etching define essentially the same subject matter, which is the fabrication of contact or via plug; therefore, they are neither independent nor distinct, but vary only in breadth and scope. A restriction to one thereof is thus again not proper.

Further, the MPEP also states in Chapter 803.01 that if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct invention. Applicants respectfully submit that not only there is no adequate reasons or support by the Office to treat the claimed inventions as distinct species, there should be no serious burden on the Office to search

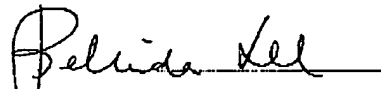
and examine the entire application even though it includes claims to independent or distinct the related inventions are essentially directed to a method of forming a contact or via plug with the multiple-step etching process.

No fee is believed to be due in connection with the filing of this paper. However, the Commissioner is authorized to charge any additional fees that may be required to Account No. 50-2620 (Order No. 9237-US-PA).

Respectfully submitted,

Date :

Feb. 5, 2004

  
Belinda Lee  
Registration No.: 46,863

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